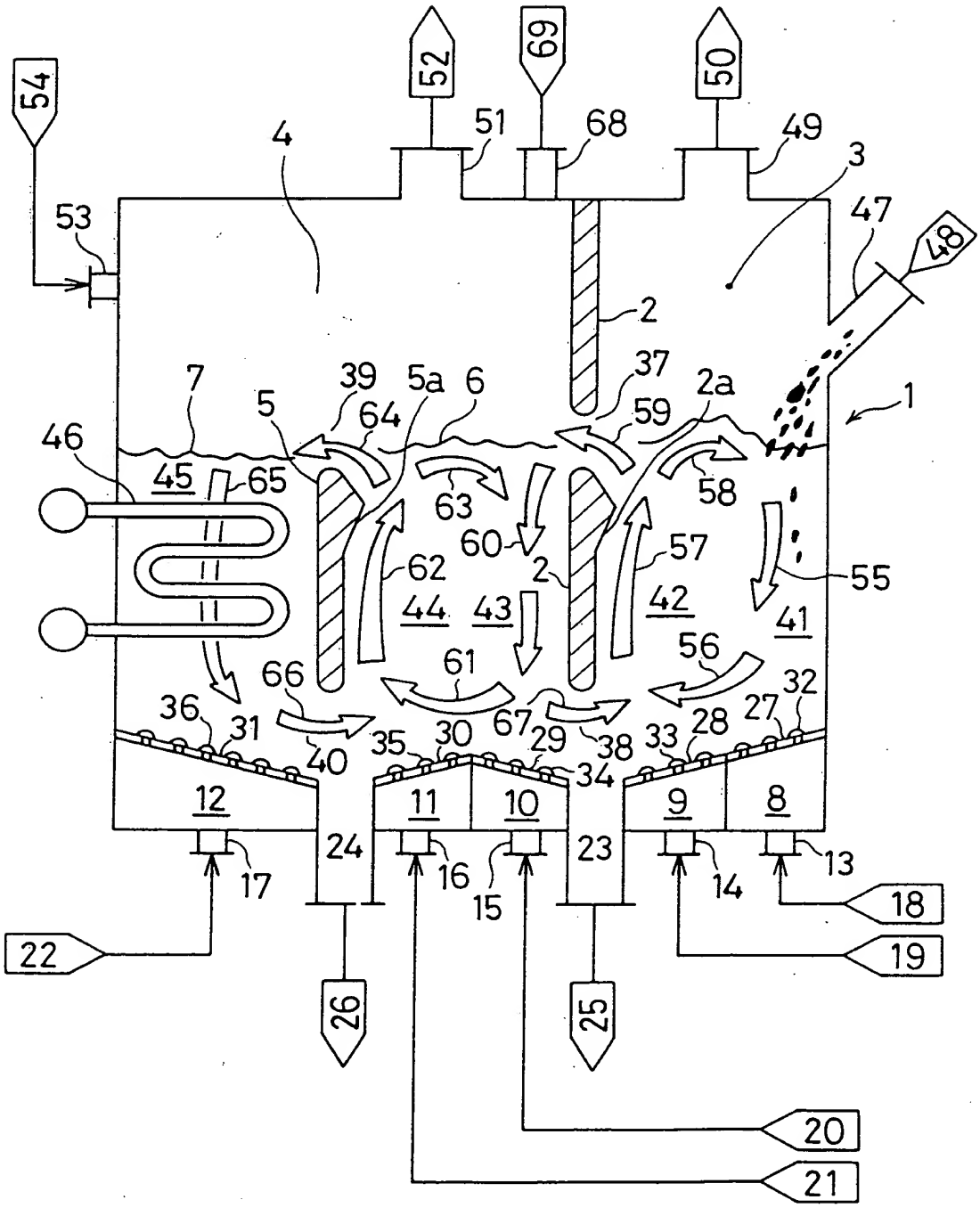
FIG. 1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69
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51
68
49
4
3
53
47
48
2
7
39
5a
6
37
2a
1
5
64
59
46
45
65
63
58
60
57
62
2
55
44
43
42
41
61
56
66
36
31
40
35
30
67
29
38
33
28
27
32
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18
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19
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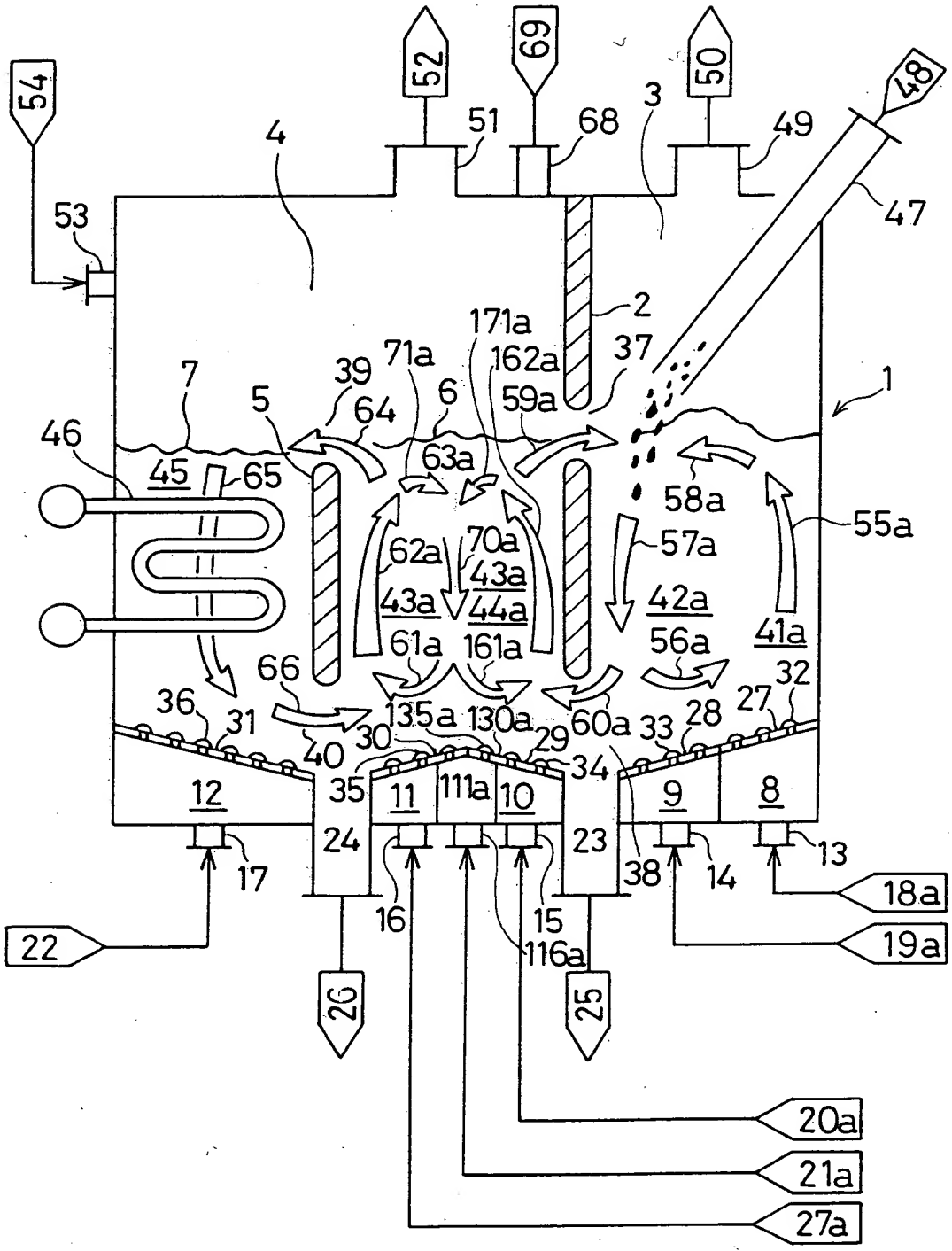
20
21

FIG. 2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2
171a
71a
162a
37
7
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64
6
59a
1
46
45
65
63a
58a
55a
62a
70a
57a
43a
43a
44a
42a
61a
161a
56a
41a
66
36
31
135a
130a
60a
33
28
27
32
40
30
29
34
12
35
11
111a
10
9
8
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18a
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16
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116a
19a
26
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20a
21a
27a

FIG. 3

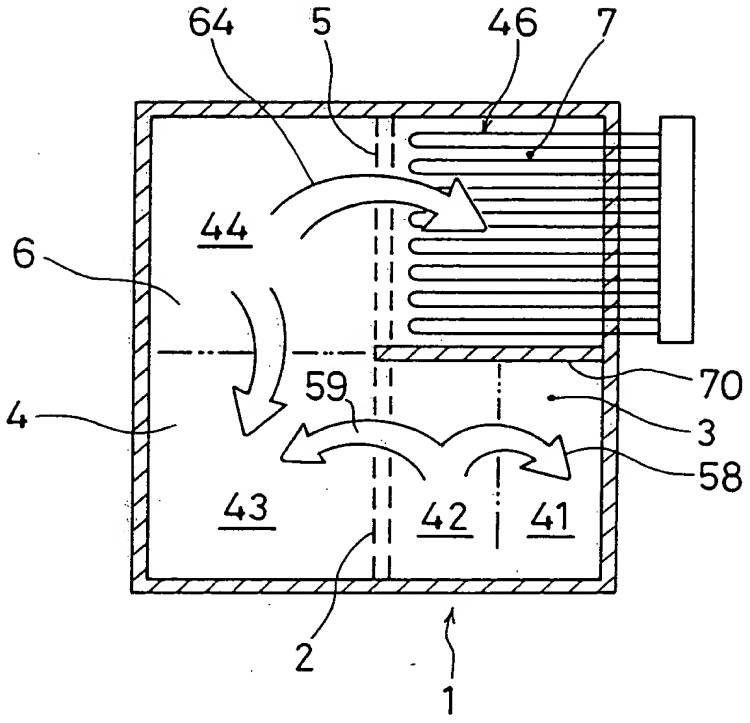
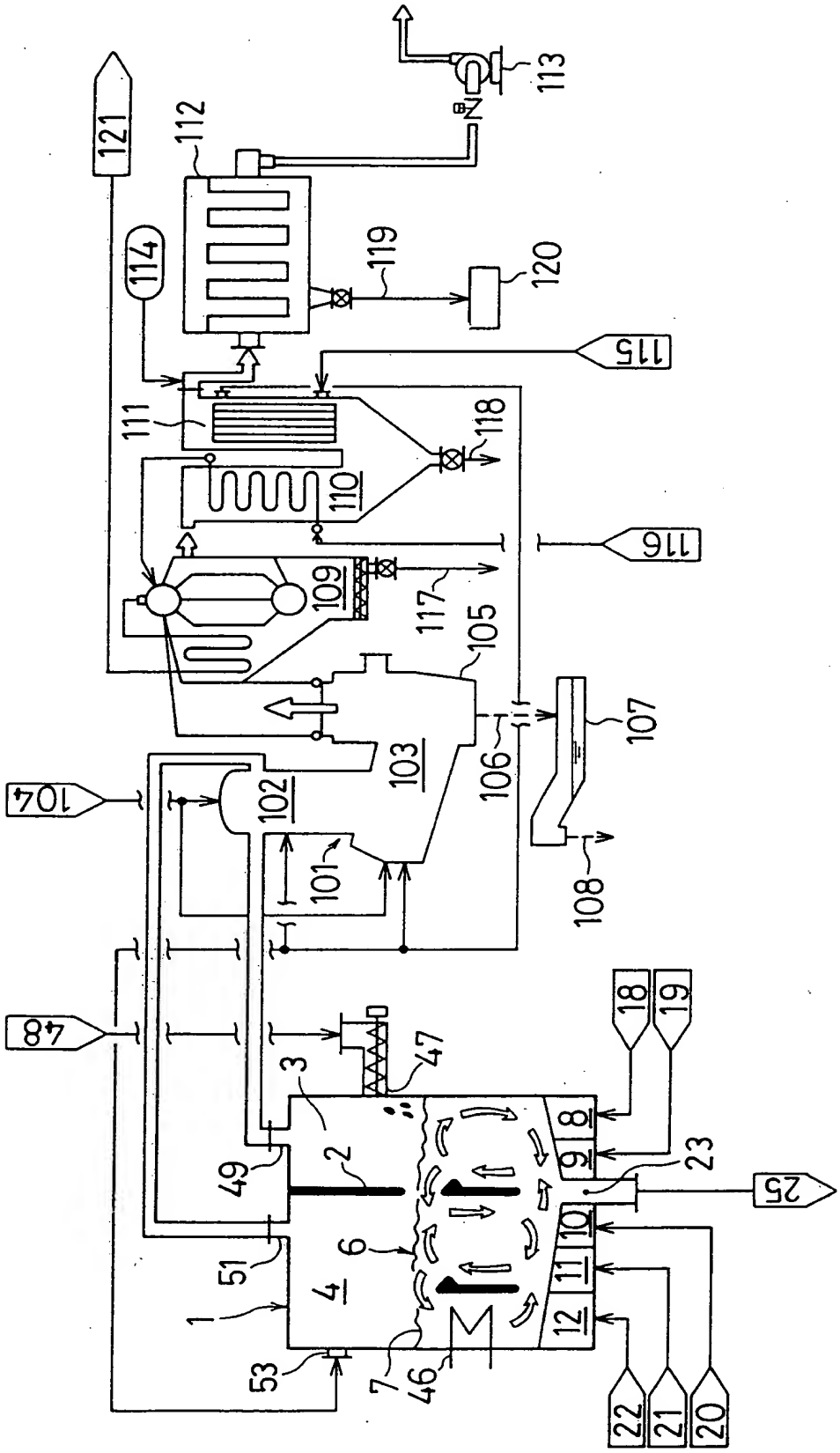
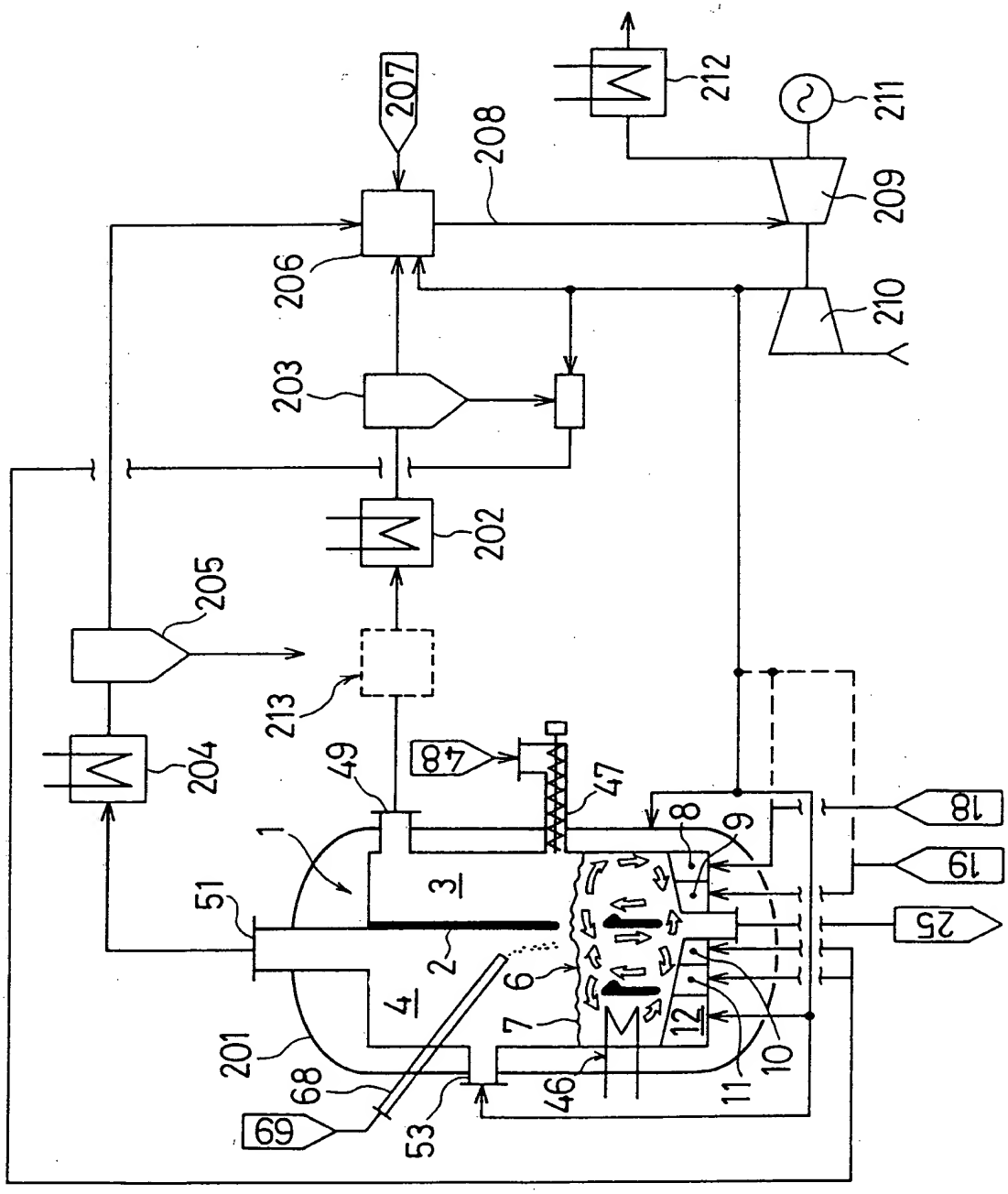


FIG. 4



00E350 "E0/0E560

FIG. 5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209
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202
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3
51
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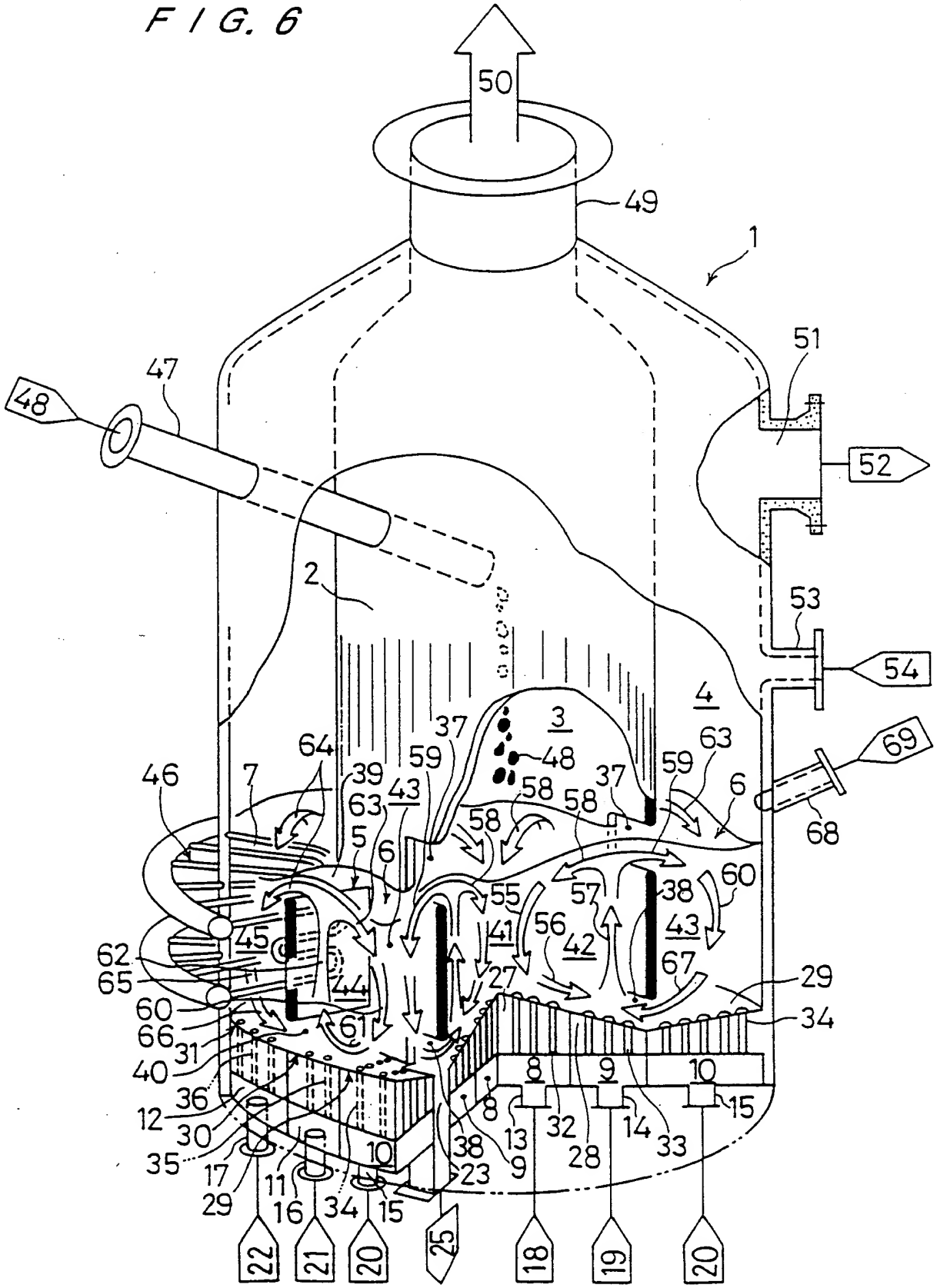
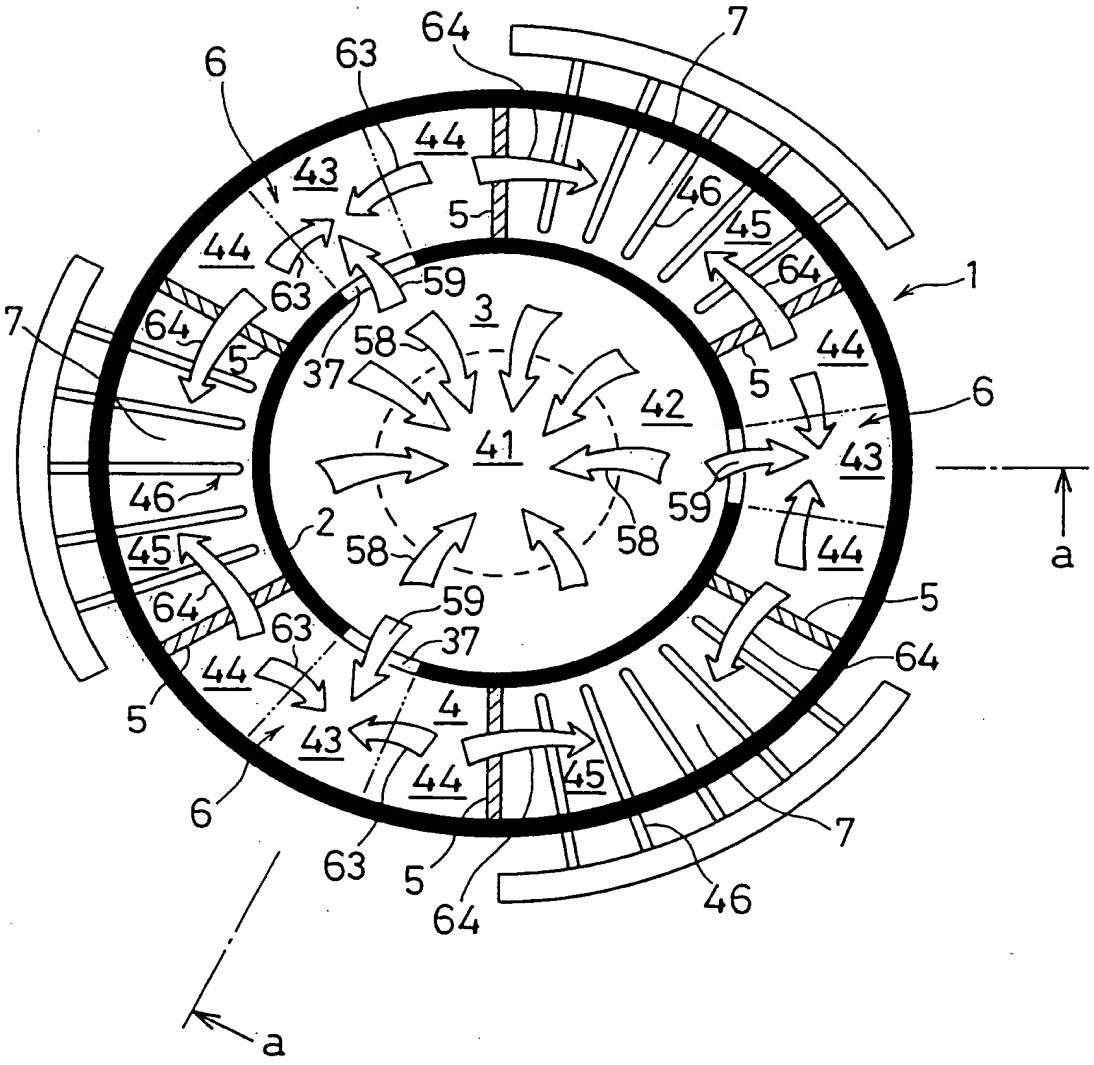
4
7
12
10
201
68
46
11
69
53

FIG. 6



09530703.052100

FIG. 7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6
41
43
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58
44
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64
44
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43
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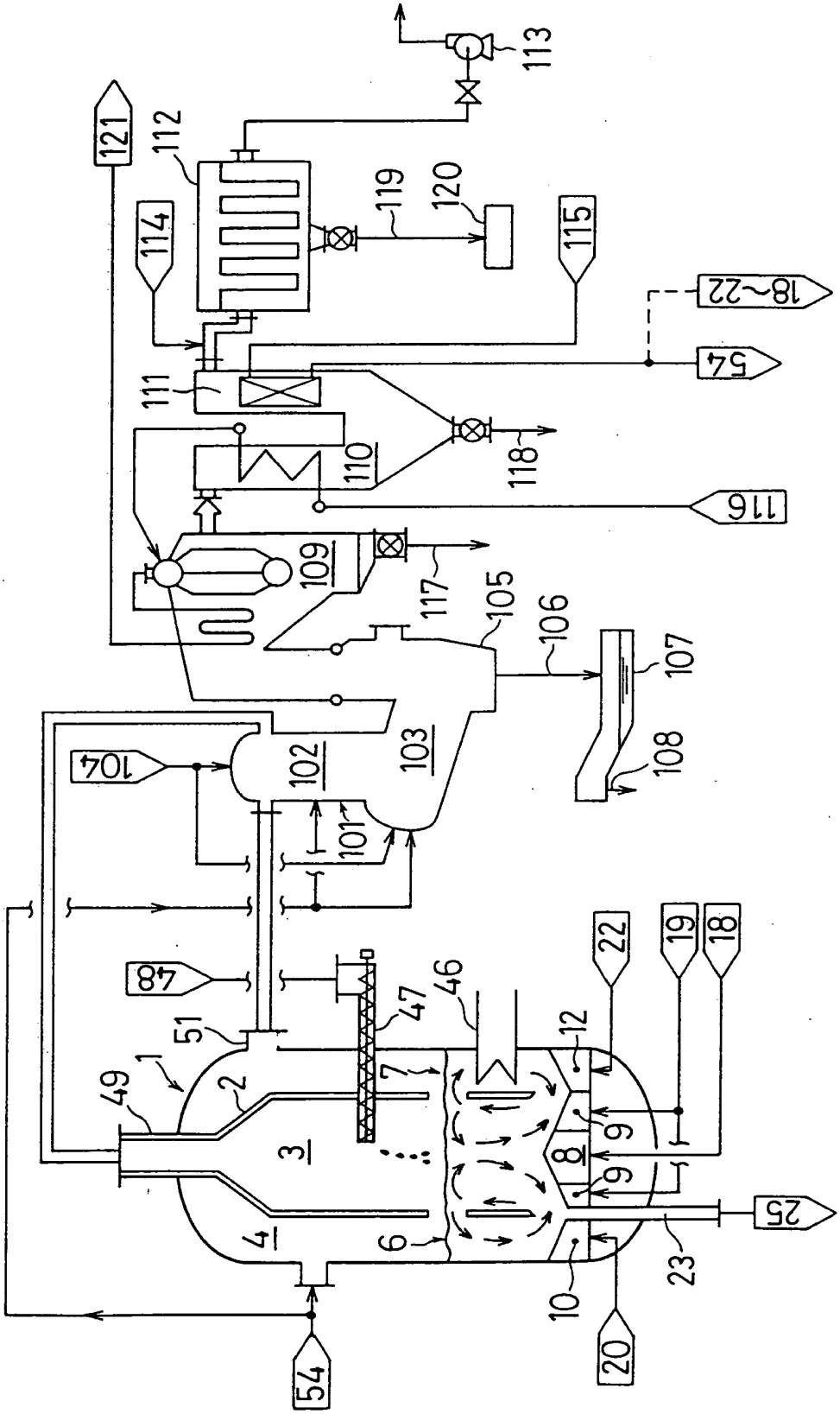
45
6
63
5
7
64
46
a
a

FIG. 8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103
101
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54

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FIG. 9

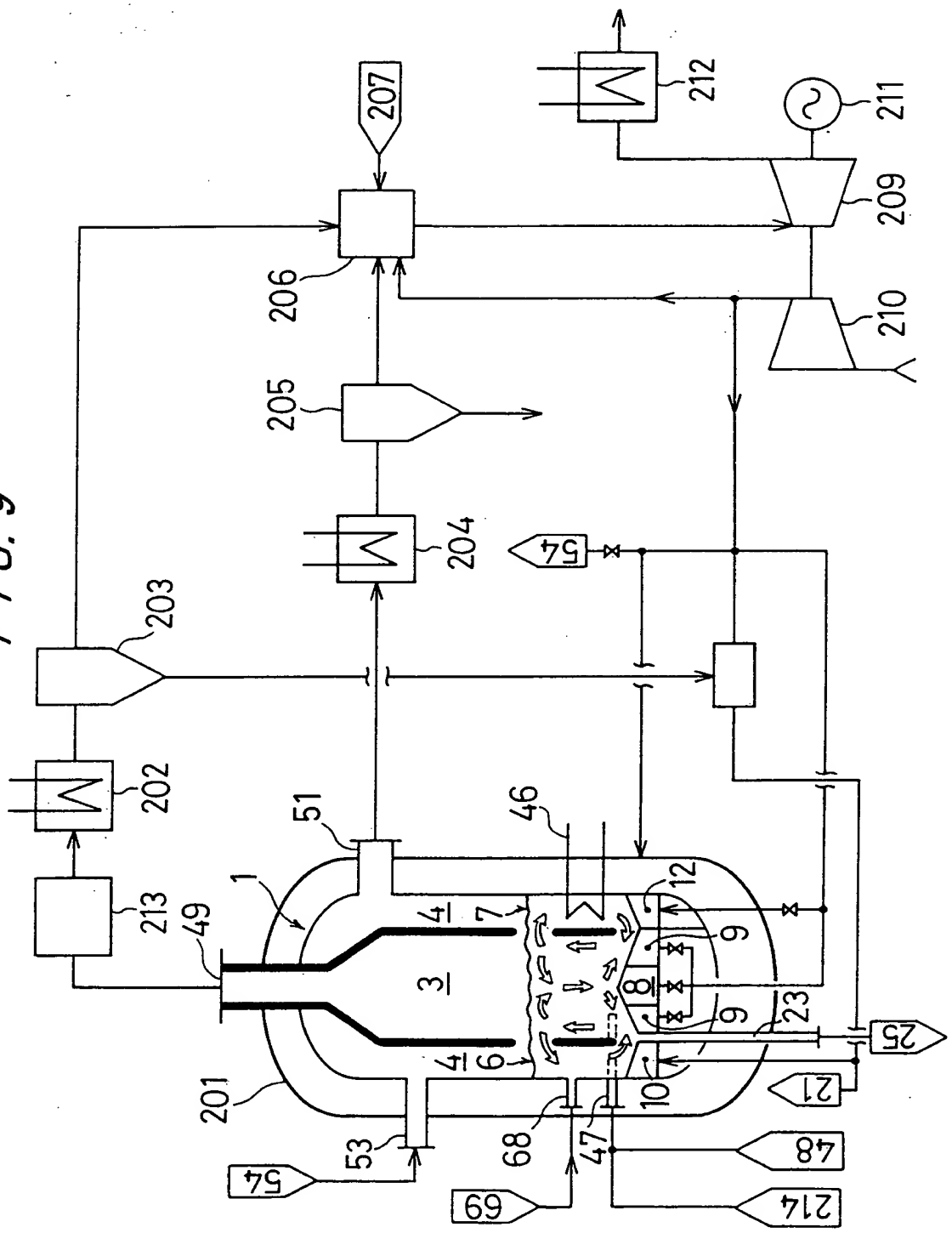

FIG. 10

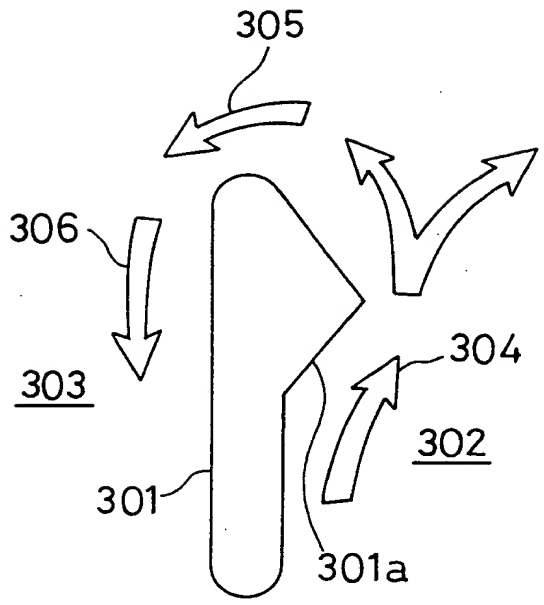

FIG. 11

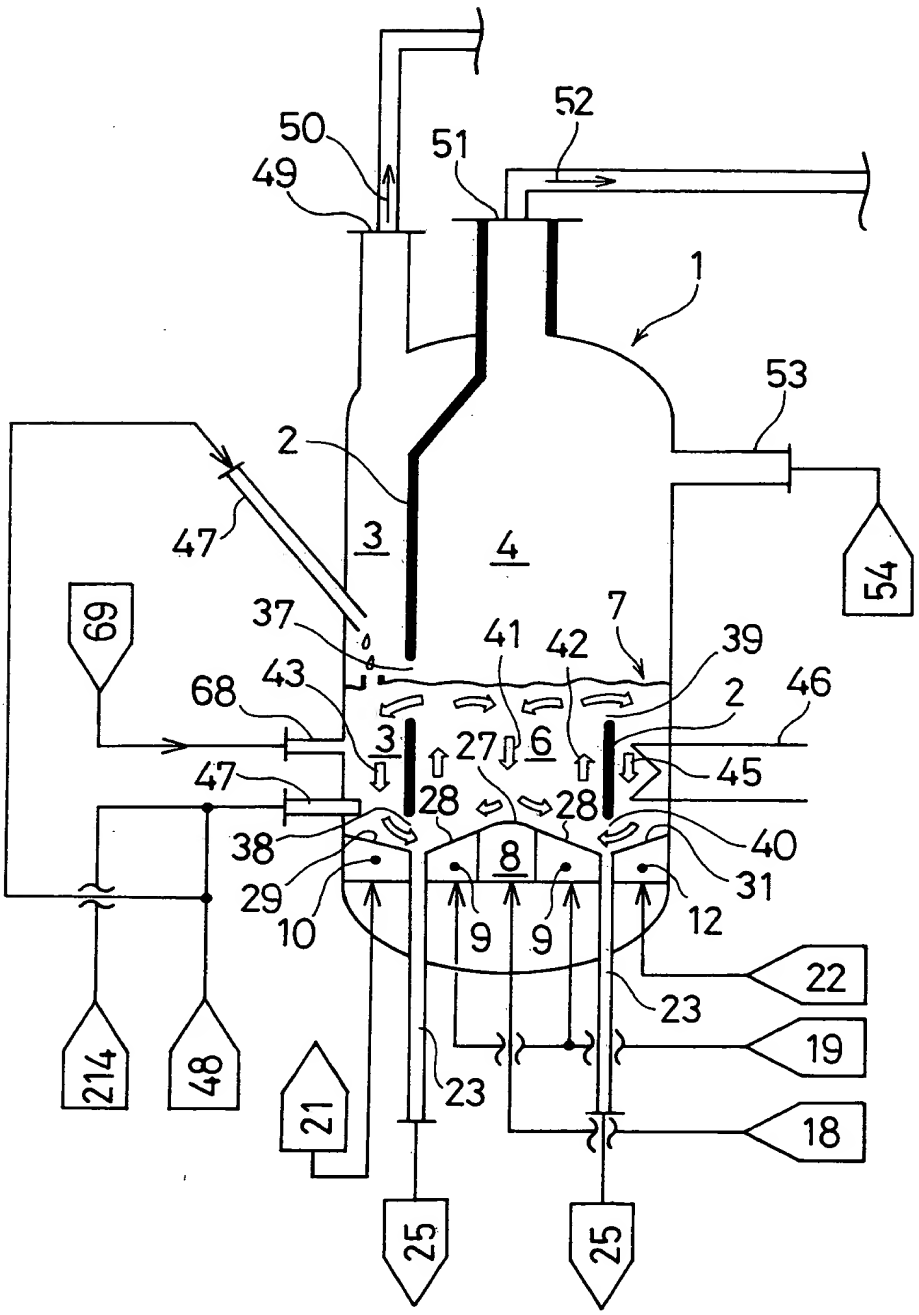
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FIG. 12

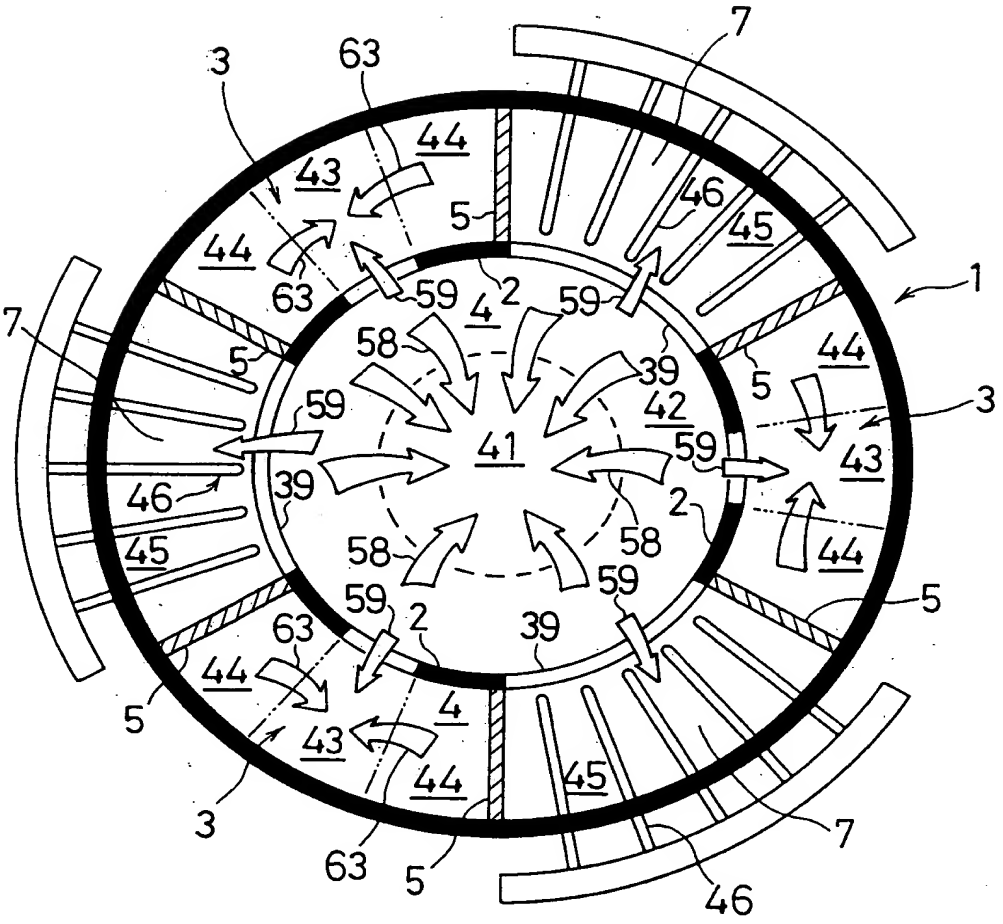
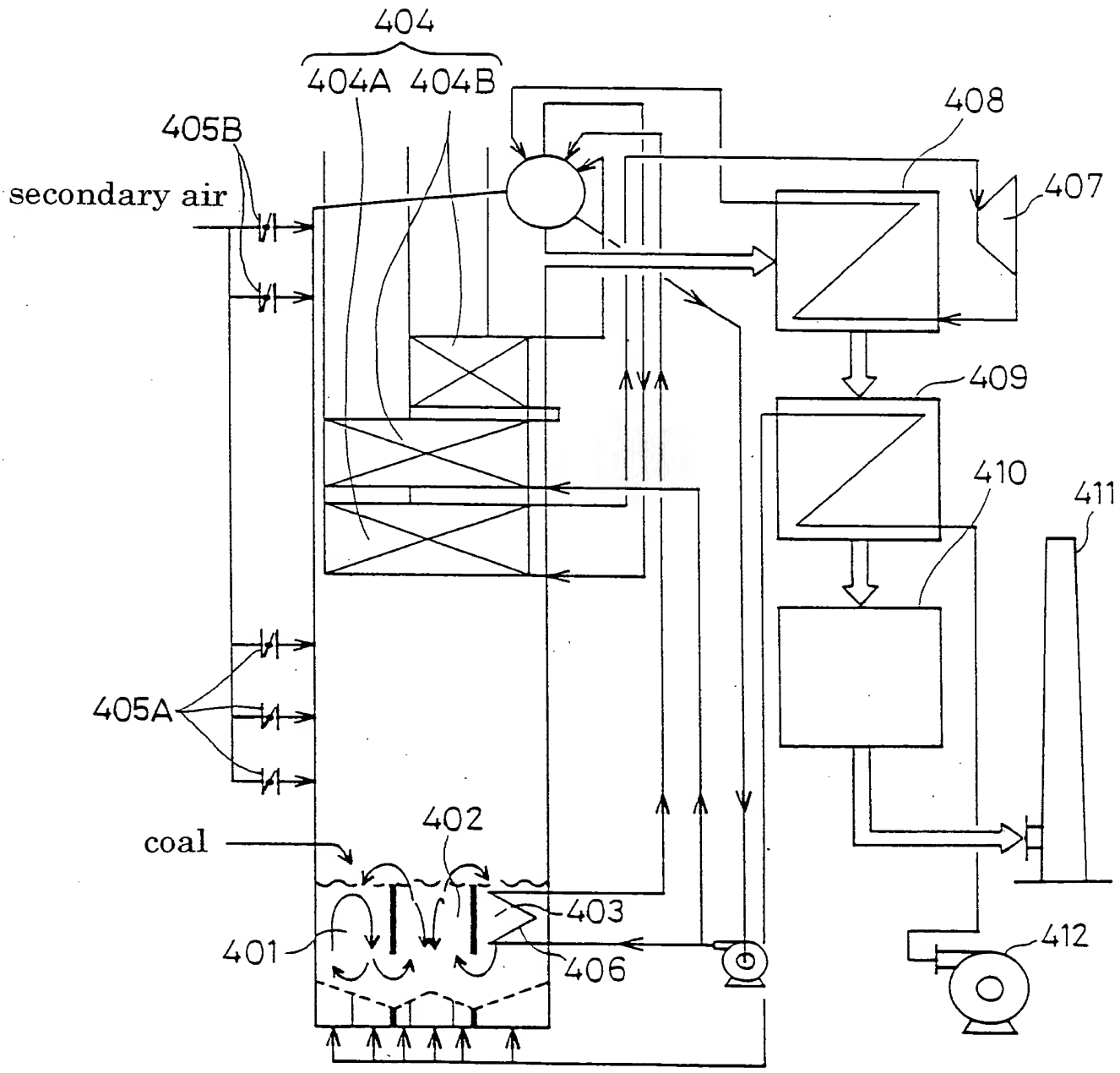


FIG. 13


404
404A 404B
405B
secondary air
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407
409
410
411
405A
coal
402
403
401
406
412

0073530 "60/06560

FIG. 14

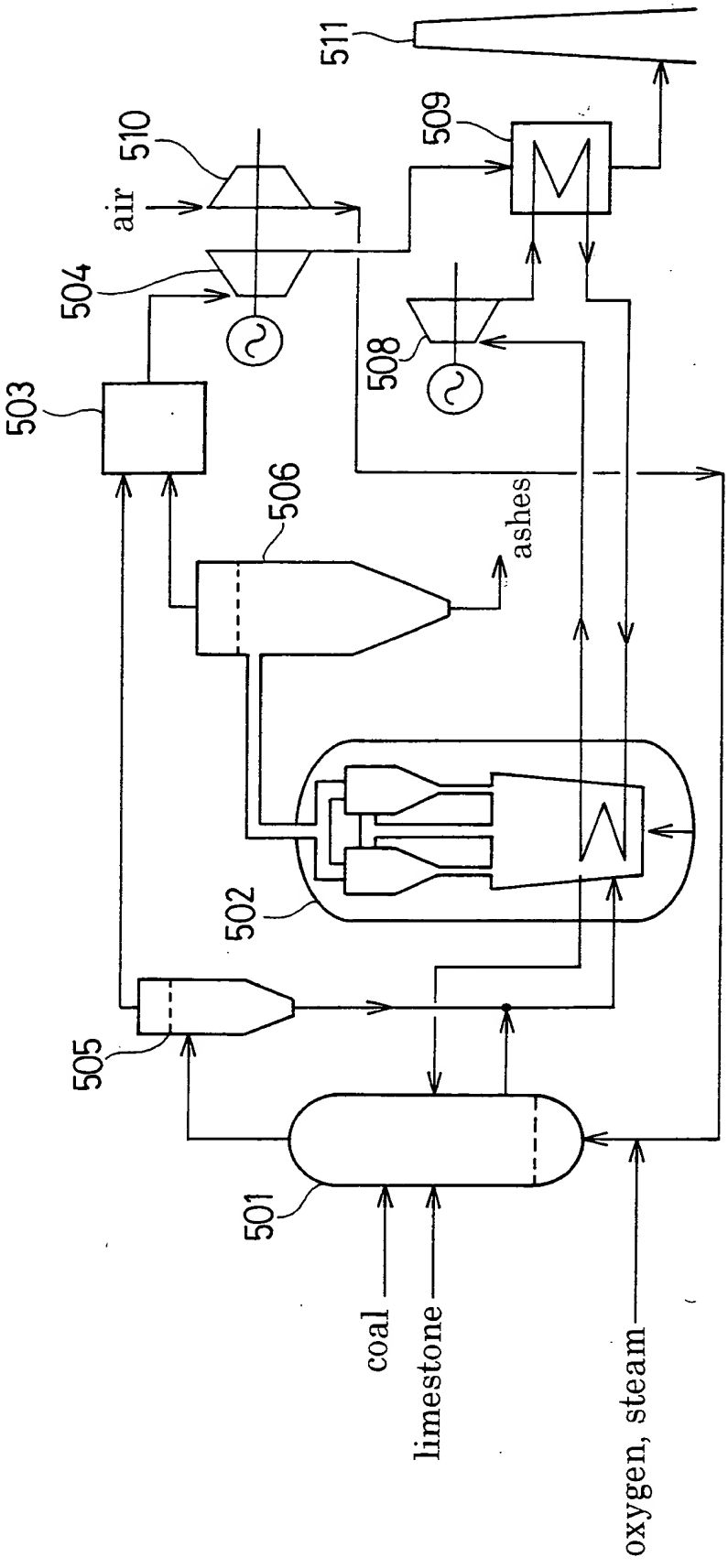

FIG. 15

overall heat transfer coefficient
(K c a l / m² h °C)
h w, m a x
actually used in a
bubbling-type
fluidized-bed boiler
1 G m f
2 G m f
mass velocity of fluidizing gas (G m f)
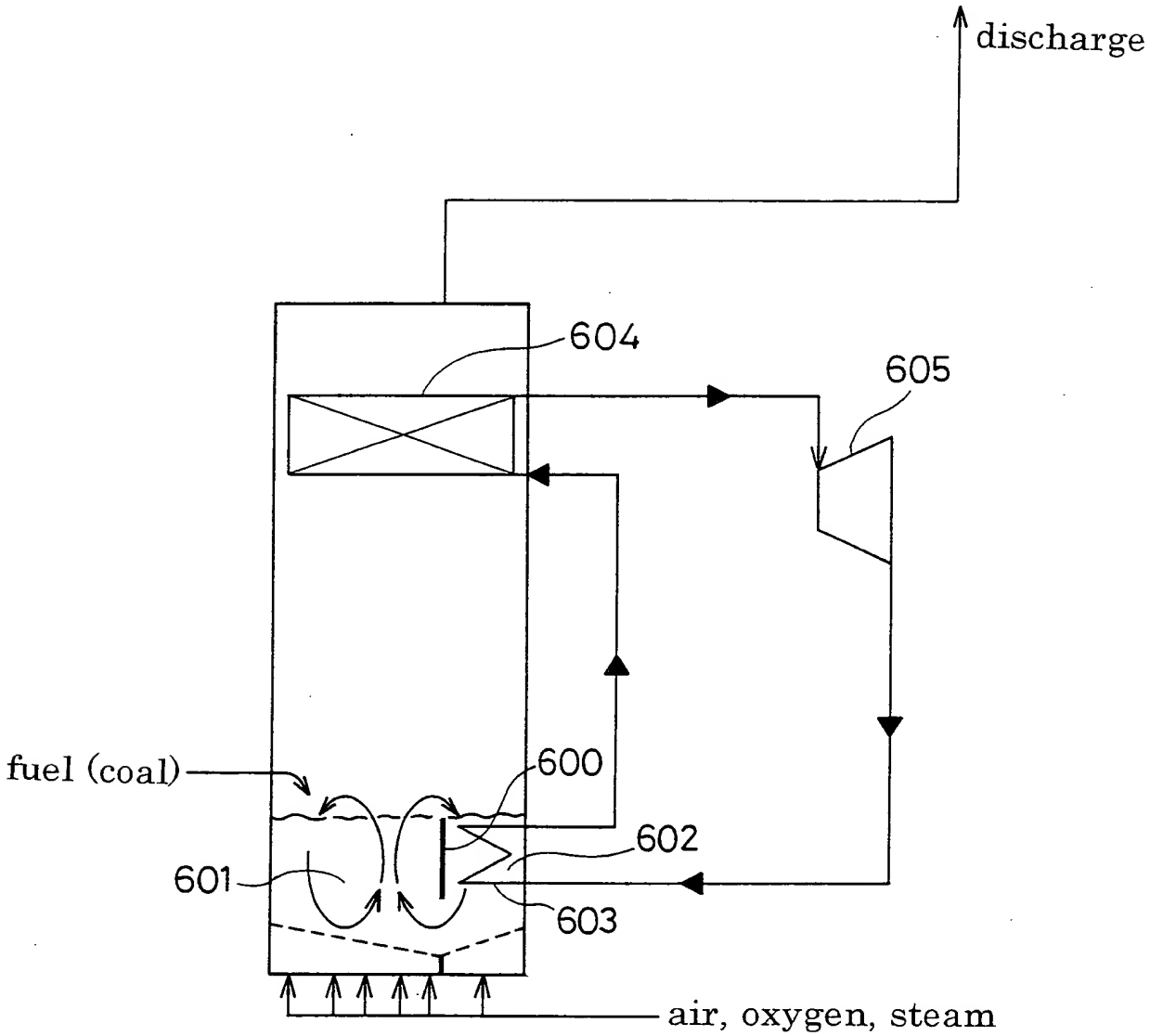
FIG. 16